Attachment 3

SUMMARY of MINUTES
RPPC RECYCLING RATE MEETING OF INTERESTED PARTIES
March 20, 1997
10:00 a.m. - 2:00 p.m.
Sacramento, Ca.

Introductions (attendants)

In-Person Participants

Mark Murray	CAW
Ron Perkins	APC
George Larson	GHLA/APC
William O'Graday	Talco
John Shedd	Talco
Luke Schmidt	NAPCOR
Don Kneass	NAPCOR
Charles Scott	Cascadia Consulting/ CIWMB
Suzie Haberlin	Cascadia Consulting/ CIWMB
Michael Harris	DOR
Caren Trgovcich	CIWMB
John Nuffer	CIWMB
S. Storelli	CIWMB
Traci Perry	CIWMB

Teleconference Participants

Patty Moore	PRCC

Opening Comments

Staff met on March 20th with Cascadia Consulting and interested parties to rank six possible methods (three for the numerator, three for the denominator) in order for the Board to develop a more cost-efficient methodology for calculating the 1996 all container RPPC recycling rate. Specifically, interested parties were asked to review the Cascadia draft RPPC recycling rate methodology evaluation, and rank the six possible methods.

After the introductions, the agenda was reviewed. The agenda addressed the following topics:

1) Review of Results of Criteria Ranking Exercise

2) Review and Discussion of Methods and Recommended Approval with Interested Parties

3) Discussion of Next Steps

Review of Results of Criteria Ranking Exercise

At the January 8th meeting, interested parties performed a brainstorming exercise to come up with a list of methodology evaluation criteria. The meeting members then ranked the evaluation criteria. Cascadia used the ranking to weight the six criteria. The six evaluation criteria and weights are:

- Accurate (5)
- Defensible (4)
- Precise (low error rate) (3)
- Affordable (cost effective) (1)
- Repeatable (1)
- Ability to validate (1)

Accuracy. How well does the methodology measure what is intended to be measured? For the numerator, the question becomes, "How well does the methodology measure the true quantity of RPPCs recycled in California?" For the denominator, the question becomes, "How well does the methodology measure the true quantity of RPPC generation in California?"

Defensible. Will the methodology produce results that can be defended by CIWMB staff as being appropriate to all stakeholders?

Precision. How well did the methodology estimate the mean? For example, in calculating the RPPC recycling rate, two methods may produce results of 25%. One method has a confidence interval of 24% - 26%, while another method has a confidence interval of 20% - 30%. The method with the smaller confidence interval is more precise.

Affordable. How much will it cost, or how many staff hours are required, to complete the methodology? In some cases, the exact costs are not known, but can be expressed relative to the cost of other methodologies.

Repeatable. Can CIWMB staff repeat the methodology in future years? The ability for a methodology to meet this criteria can depend on such factors as data availability and straightforwardness.

Ability to validate. Can individual pieces of data necessary to complete the methodology be validated? Generally, more confidence can be placed on those

methodologies in which individual data points can be verified. Another measure of ability to validate is how well the result compares with benchmarks.

The interested parties considered "accuracy," "defensibility," and "precision" to be the criteria that carry the most weight in evaluating the methodologies.

Individually, group members, using the evaluation criteria performed a "homework" assignment to pare down list of possible methodologies. Specifically, this exercise consisted of members evaluating possible RPPC recycling rate methodologies. Cascadia used the results of group evaluation "homework" assignment to rank the possible methods. The consultant would provide an in-depth evaluation of six possible methods (3 for the numerator and 3 for the denominator).

Using the six evaluation criteria, the consultant developed a draft report (Attachment 2 faxed to interested parties on March 14, 1997.) evaluating six possible methodologies (three for the numerator, three for the denominator). In the draft, each method is explained, followed by an identification of the data necessary to complete the method, an assessment of CIWMB staff's ability to complete the work in house, and an evaluation of the method against each criteria developed by interested parties.

Review and Discussion of Methods and Recommended Approval with Interested Parties

Interested parties reviewed and discussed each method and asked Cascadia for clarification on the methods presented. After review and discussion interested parties ranked each of the six methods for each of the six evaluation criteria. The results of this ranking are presented in the attached two tables.

Numerator Issues

Interested Parties (IP) had concerns that the Board may not be able to hold confidential surveys received from respondents. IP scoring assumed confidentially could be guaranteed. (If confidentiality can not be guaranteed, these three methods would have received much lower scores.) Some IP members also indicated that it may be very difficult for Board staff to get either, nationwide reclaimers and exporters, or California processors to respond to a State of California sponsored survey concerning volumes of plastics recycled.

California processors are currently downsizing, are not as interested in recycling issues, and may not have the time or commitment to respond to the Board. An IP member indicated that a consultant to the Board may be able to elicit a higher response rate from California processors than if Board staff conducted the survey. (Due to the issue of confidentially and trust.) Also, some IP felt national reclaimers most likely would not respond to a Board survey, even if confidentially was guaranteed, as reclaimers are very hesitant to release information that is vital to their business and because a governmental agency is conducting the study. Also, in some instances, plastic bales are traded between processors masking the origin of the material. R.W. Beck, who conducts the annual national plastic survey for APC, has been able to develop a

relationship with national reclaimers over the last several years. This relationship has led to increased participation and survey response. To develop this relationship, Beck includes the Association of PostConsumer Plastic Recyclers in the data review and strictly guarantees the confidentially of the information. Lastly, a Board reclaimer survey would need to include a survey of plastic exporters. Historically, the response rate of exporters to surveys can be characterized as poor, leaving holes in the results of a reclaimer study.

Even with the caveats noted above, IP indicated that the Board should adopt one of the top scoring three methods to calculate the numerator. The IP indicated that any one of the three methods would be superior to a partial sampling of reclaimers and exporters (i.e., Survey 1995 Respondents), or an estimate based on information from the 1995 recycling survey (i.e., Adjust 1995 Recycling Data).

Lastly, IP indicated that if the Board does not adopt one of the three methods to calculate the numerator, the recycling rate should not be computed.

Denominator Issues

The IP recommended that the Board conduct a waste composition study every three or five years to calculate the denominator. IP indicated that they were aware of the cost to conduct a waste sort and that the high cost would not be justified if only RPPC's were included in the study. IP indicated that the waste composition study should be expanded to include all California waste generation.

The addition cost to expand the study would be marginal but would have a far greater benefit to the Board in understanding California's overall waste stream and provide an accurate RPPC waste disposal analysis.

Discussion of Next Steps

Board staff explained how the results of this exercise would be included in an agenda item that will be considered by the Local Assistance and Planning Committee on April 16. Staff discussed how the recommendation of interested parties and the recommendation of Cascadia will be evaluated by staff and a staff recommendation will be made to the Committee. The agenda item will reflect the concerns and recommendation of interested parties and the consultant.

Attachment 3

Numerator Methods Ranking

Interested Parties

CRITERIA AND RELATIVE WEIGHT

NUMERATOR METHODS	Accuracy (5)	Ability to Defend (4)	Precision (3)	Affordability (1)	Ability to Repeat (1)	Ability to Validate (1)	**Total Score**
Reclaimer Survey							
CIWMB Staff Survey	3.5	3.5	3.5	2.5	4.5	3.5	**52.5**
Partner with National Survey	5	5	5	1	1	1	**63**
Survey 1995 Respondents	2	2	2	4	3	3.5	**34.5**
Survey Processors	3.5	3.5	3.5	2.5	4.5	3.5	**52.5**
Adjust 1995 Recycling Data	1	1	1	5	2	3.5	**22.5**

Denominator Methods Ranking

Interested Parties

CRITERIA AND RELATIVE WEIGHT

DENOMINATOR METHODS	Accuracy (5)	Ability to Defend (4)	Precision (3)	Affordability (1)	Ability to Repeat (1)	Ability to Validate (1)	**Total Score**
Conduct Waste Comp Survey	3	3	3	2	3	3	**44**
Pro-Rate National Resin Sales	1	1	1.5	1	1.5	1	**17**
Extrapolate 1996 RPPC Generation	2	2	1.5	3	1.5	2	**29**